

In the claims:

1. A name resolution server which conducts name resolution with respect to a received name resolution request message and returning a result of said name resolution by a name resolution response message, which
5 obtains,

based on information contained in said name resolution request message, attribute information regarding a user as a sender which is not contained in the name resolution request message to conduct said name
10 resolution based on the attribute information.

2. A name resolution server which conducts name resolution with respect to a received name resolution request message and returning a result of said name resolution by a name resolution response message,
5 comprising:

a user information obtaining unit which obtains, as attribute information regarding a user as a sender of said received name resolution request message, said attribute information other than information contained
10 in said name resolution request message, and

a response generation unit which conducts said name resolution by using said attribute information obtained by said user information obtaining unit to generate a name resolution response message.

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3. The name resolution server as set forth in claim 2, wherein

said attribute information obtained by said user information obtaining unit are of two or more kinds.

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4. The name resolution server as set forth in claim 2, wherein

said attribute information obtained by said user information obtaining unit includes

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at least arbitrary one of a user ID, user location information, information regarding a terminal used and information regarding a network including a kind of connection line, a connection line speed and an IP address of a connected NAS.

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5. The name resolution server as set forth in claim 2, further comprising

as an internal element, a user information database in which said attribute information is stored,

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wherein

said user information obtaining unit obtains said attribute information from said user information database.

6. The name resolution server as set forth in claim 2, wherein

5 said user information obtaining unit obtains said
attribute information from an external database server
having a user information database in which said
attribute information is stored.

7. The name resolution server as set forth in claim
6, wherein

5 said user information obtaining unit uses a name
resolution request message in obtaining said attribute
information from said external database server.

8. The name resolution server as set forth in claim
6, wherein

5 said external database server is other name
resolution server externally disposed.

9. The name resolution server as set forth in claim
2, wherein

5 said response generation unit transmits a name
resolution request message containing said attribute
information obtained by said user information obtaining
unit to other name resolution server to execute
processing of making said name resolution be conducted
at said other name resolution server.

10. The name resolution server as set forth in claim
5, further comprising:

an authentication information obtaining unit
which obtains, from an authentication server which
5 authenticates a user in response to an authentication
request from said user, said attribute information
obtained when said authentication server conducts
authentication processing of said user, and

10 a user information updating unit which updates
the contents of said user information database based on
said attribute information obtained.

11. The name resolution server as set forth in claim
10, wherein

said authentication information obtaining unit
detects a change of log-in statuses of a user and when
5 the user logs in, the user information updating unit
registers information indicative of the log-in statuses
and said attribute information at said user information
database and when the user logs out, deletes said
information indicative of the log-in statuses and said
10 attribute information from said user information
database.

12. The name resolution server as set forth in claim
10, wherein

said authentication information obtaining unit
obtains said attribute information by using a Proxy
5 function in a RADIUS protocol.

13. The name resolution server as set forth in claim 10, wherein

said authentication information obtaining unit obtains said attribute information by using a Relay function in a RADIUS protocol.

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14. The name resolution server as set forth in claim 10, wherein

said authentication information obtaining unit obtains said attribute information by using an NFS protocol.

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15. The name resolution server as set forth in claim 10, wherein

said authentication information obtaining unit obtains said attribute information by using an SNMP protocol.

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16. The name resolution server as set forth in claim 10, wherein

said user information updating unit uses a DNS Dynamic Update function for updating the contents of said user information database.

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17. A packet transfer device which transfers a received packet to other node, wherein

control of a packet transfer method as a method
of transferring said received packet to said other node
is conducted based on information contained in a name
resolution response message transmitted from a name
resolution server to a client.

18. A packet transfer device which transfers a
received packet to other node, comprising

a DNS proxy unit which once receives a name
resolution response message transmitted from a name
resolution server to a client and rewrites the contents
of a routing table in which a packet transfer method as
a method of transferring said received packet to said
other node is held based on information contained in
said name resolution response message.

19. The packet transfer device as set forth in claim
17, wherein

said packet transfer method includes at least one
of packet transfer priority, a logical network ID, a
logical channel ID, and header rewriting, addition and
deletion methods.

20. The packet transfer device as set forth in claim
18, wherein

in response to said name resolution response
message once received, said DNS proxy unit deletes

5 information regarding said packet transfer method among
information contained in said name resolution response
message to transmit said name resolution response
message obtained to said client.

21. A packet transfer device which transfers a
received packet to other node, comprising:

a user information obtaining unit which obtains
attribute information regarding a user as a sender of a
5 name resolution request message transmitted from a
client to a name resolution server, and

a DNS proxy unit which once receives said name
resolution request message, obtains attribute
information regarding the user of said name resolution
10 request message through said user information obtaining
unit and adding said attribute information to said name
resolution request message to transmit said name
resolution request message obtained to said name
resolution server.

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22. The packet transfer device as set forth in claim
18, further comprising

a user information obtaining unit which obtains
attribute information regarding a sender of a name
5 resolution request message transmitted from said client
to said name resolution server, wherein

said DNS proxy unit once receives said name

10 resolution request message, obtains attribute
information regarding the sender of said name resolution
request message through said user information obtaining
unit and transmits said name resolution request message
with said attribute information added to said name
resolution server.

23. The packet transfer device as set forth in claim
21, further comprising,

5 as an internal element, a user information
database in which said attribute information is stored,
wherein

said user information obtaining unit obtains said
attribute information from said user information
database.

24. The packet transfer device as set forth in claim
21, wherein

5 said user information obtaining unit obtains said
attribute information from an external database server
having a user information database in which said
attribute information is stored.

25. The packet transfer device as set forth in claim
24, wherein

said user information obtaining unit uses a name
resolution request message in obtaining said attribute

5 information from said external database server.

26. The packet transfer device as set forth in claim 21, wherein

said external database server is a name resolution server externally disposed.

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27. The packet transfer device as set forth in claim 23, further comprising:

a user authentication unit which identifies and authenticates a user at a client connected to its own node, and

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a user information updating unit which updates the contents of said user information database based on attribute information regarding said user obtained at the time of authentication.

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28. A name resolution server which conducts name resolution with respect to a received name resolution request message and returns a result of said name resolution by a name resolution response message, wherein

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said name resolution response message contains a packet transfer method at a packet transfer device.

29. The name resolution server as set forth in claim 1, wherein

said name resolution response message contains a packet transfer method at a packet transfer device.

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30. A name resolution program operable on a name resolution server which executes processing of conducting name resolution with respect to a received name resolution request message and returning a result of said name resolution by a name resolution response message, comprising

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a function of obtaining, based on information contained in said name resolution request message, attribute information regarding a user as a sender which is not contained in the name resolution request message to conduct said name resolution based on the attribute information.

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31. A name resolution program operable on a name resolution server which executes processing of conducting name resolution with respect to a received name resolution request message and returning a result of said name resolution by a name resolution response message, comprising:

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a user information obtaining function of obtaining, as attribute information regarding a user as a sender of said received name resolution request message, said attribute information other than information contained in said name resolution request

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message, and

a response generation function of conducting said name resolution by using said attribute information
15 obtained by said user information obtaining function to generate a name resolution response message.

32. The name resolution program as set forth in claim 31, wherein

said attribute information obtained by said user information obtaining function are of two or more kinds.

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33. The name resolution program as set forth in claim 31, wherein

said attribute information obtained by said user information obtaining function includes

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at least arbitrary one of a user ID, user location information, information regarding a terminal used and information regarding a network including a kind of connection line, a connection line speed and an IP address of a connected NAS.

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34. The name resolution program as set forth in claim 31, further comprising,

as an internal element, a user information database in which said attribute information is stored,
5 wherein

said user information obtaining function obtains

said attribute information from said user information database.

35. The name resolution program as set forth in claim 31, wherein

said user information obtaining function obtains said attribute information from an external database server having a user information database in which said attribute information is stored.

36. The name resolution program as set forth in claim 35, wherein

said user information obtaining function uses a name resolution request message in obtaining said attribute information from said external database server.

37. The name resolution program as set forth in claim 35, wherein

said external database server is other name resolution server externally disposed.

38. The name resolution program as set forth in claim 31, wherein

said response generation function transmits a name resolution request message containing said attribute information obtained by said user information obtaining function to other name resolution server to

execute processing of making said name resolution be conducted at said other name resolution server.

39. The name resolution program as set forth in claim 34, further comprising:

an authentication information obtaining function of obtaining, from an authentication server which authenticates a user in response to an authentication request from said user, said attribute information obtained when said authentication server conducts authentication processing of said user, and

a user information updating function of updating the contents of said user information database based on said attribute information obtained.

40. The name resolution program as set forth in claim 39, wherein

said authentication information obtaining function detects a change of log-in statuses of a user and when the user logs in, the user information updating function registers information indicative of the log-in statuses and said attribute information at said user information database and when the user logs out, deletes said information indicative of the log-in statuses and said attribute information from said user information database.

41. The name resolution program as set forth in claim 39, wherein

said authentication information obtaining function obtains said attribute information by using a Proxy function in a RADIUS protocol.

42. The name resolution program as set forth in claim 39, wherein

said authentication information obtaining function obtains said attribute information by using a Relay function in a RADIUS protocol.

43. The name resolution program as set forth in claim 39, wherein

said authentication information obtaining function obtains said attribute information by using an NFS protocol.

44. The name resolution program as set forth in claim 39, wherein

said authentication information obtaining function obtains said attribute information by using an SNMP protocol.

45. The name resolution program as set forth in claim 39, wherein

said user information updating function uses a

5 DNS Dynamic Update function for updating the contents of
said user information database.

46. A packet transfer program operable on a packet
transfer device which conducts processing of
transferring a received packet to other node, comprising
a function of conducting control of a packet
5 transfer method as a method of transferring said
received packet to said other node based on information
contained in a name resolution response message
transmitted from a name resolution server to a client.

47. A packet transfer program operable on a packet
transfer device which conducts processing of
transferring a received packet to other node, comprising
a DNS proxy function of once receiving a name
5 resolution response message transmitted from a name
resolution server to a client and rewriting the contents
of a routing table in which a packet transfer method as
a method of transferring said received packet to said
other node is held based on information contained in
10 said name resolution response message.

48. The packet transfer program as set forth in claim
46, wherein

said packet transfer method includes at least one
of packet transfer priority, a logical network ID, a

5 logical channel ID, and header rewriting, addition and deletion methods.

49. The packet transfer program as set forth in claim 47, wherein

 in response to said name resolution response message once received, said DNS proxy function deletes
5 information regarding said packet transfer method among information contained in said name resolution response message to transmit said name resolution response message obtained to said client.

50. A packet transfer program operable on a packet transfer device which conducts processing of transferring a received packet to other node, comprising:

5 a user information obtaining function of obtaining attribute information regarding a user as a sender of a name resolution request message transmitted from a client to a name resolution server, wherein

 a DNS proxy function is executed of once
10 receiving said name resolution request message, obtaining attribute information regarding the user of said name resolution request message through said user information obtaining function and adding said attribute information to said name resolution request message to
15 transmit said name resolution request message obtained

to said name resolution server.

51. A name resolution method by a name resolution server which executes processing of conducting name resolution with respect to a received name resolution request message and returning a result of said name resolution by a name resolution response message,
5 comprising

the step of obtaining, based on information contained in said name resolution request message, attribute information regarding a user as a sender which
10 is not contained in the name resolution request message to conduct said name resolution based on the attribute information.

52. A name resolution method by a name resolution server which executes processing of conducting name resolution with respect to a received name resolution request message and returning a result of said name resolution by a name resolution response message,
5 comprising the steps of:

obtaining, as attribute information regarding a user as a sender of said received name resolution request message, said attribute information other than
10 information contained in said name resolution request message, and

conducting said name resolution by using said

attribute information obtained to generate a name resolution response message.

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53. A packet transfer method which conducts processing of transferring a received packet to other node, comprising

5 the step of conducting control of the packet transfer method as a method of transferring said received packet to said other node based on information contained in a name resolution response message transmitted from a name resolution server to a client.

54. A packet transfer method which conducts processing of transferring a received packet to other node, comprising

5 the step of once receiving a name resolution response message transmitted from a name resolution server to a client and rewriting the contents of a routing table in which the packet transfer method as a method of transferring said received packet to said other node is held based on information contained in
10 said name resolution response message.

55. A packet transfer method which conducts processing of transferring a received packet to other node, comprising the steps of:

obtaining attribute information regarding a user

5 as a sender of a name resolution request message
transmitted from a client to a name resolution server,
and

once receiving said name resolution request
message, obtaining attribute information regarding the
10 user of said name resolution request message by said
user information obtaining function and adding said
attribute information to said name resolution request
message to transmit said name resolution request message
obtained to said name resolution server.